



## General

### Guideline Title

Pain management in the long term care setting.

### Bibliographic Source(s)

American Medical Directors Association (AMDA). Pain management in the long term care setting. Columbia (MD): American Medical Directors Association (AMDA); 2012. 60 p. [93 references]

### Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: American Medical Directors Association (AMDA). Pain management in the long-term care setting. Columbia (MD): American Medical Directors Association (AMDA); 2009. 48 p.

## Regulatory Alert

### FDA Warning/Regulatory Alert

Note from the National Guideline Clearinghouse: This guideline references a drug(s) for which important revised regulatory and/or warning information has been released.

- [March 22, 2016 – Opioid pain medicines](#) : The U.S. Food and Drug Administration (FDA) is warning about several safety issues with the entire class of opioid pain medicines. These safety risks are potentially harmful interactions with numerous other medications, problems with the adrenal glands, and decreased sex hormone levels. They are requiring changes to the labels of all opioid drugs to warn about these risks.

## Recommendations

### Major Recommendations

*Note from the American Medical Directors Association (AMDA) and the National Guideline Clearinghouse (NGC):* The original full-text guideline provides an algorithm on "Pain Management in the Long Term Care Setting" to be used in conjunction with the written text. Refer to the "Guideline Availability" field for information on obtaining the algorithm, as well as the full text of the guideline, which provides additional details. Recommendations were still being graded at the time of guideline printing and were thus not available for inclusion in this NGC summary.

## Recognition

### Step 1

#### Is Pain Present?

Evaluate the patient for pain upon admission, during periodic scheduled assessments, and whenever a change occurs in his or her condition (e.g., after a fall or other trauma or when a change occurs in the patient's behavior, daily routines, or mental status).

Table. Nonspecific Signs and Symptoms That May Suggest the Presence of Pain

- Bracing, guarding, rubbing
- Change in behavior
- Change in gait
- Decreased activity levels
- Eating or sleeping poorly
- Fidgeting, increasing or recurring restlessness
- Frowning, grimacing, fearful facial expressions, grinding of teeth
- Loss of function
- Resisting certain movements during care
- Sighing, groaning, crying, breathing heavily
- Striking out, increasing or recurring agitation

### Step 2

#### Have the Characteristics and Likely Causes of Pain Been Adequately Defined?

Conduct an initial review to determine whether the characteristics and causes of the patient's pain have been identified. Appropriate members of the interdisciplinary team should:

- Review the patient's known diagnoses or conditions and identify possible additional factors that may be causing or contributing to pain.
- Ask the patient to rate the intensity of his or her pain, using either a numerical score or a verbal or visual descriptor that is appropriate for and preferred by the patient.
- Ask about key characteristics of the pain (e.g., duration, frequency, location, onset, pattern, radiation) and for words that describe its qualities (e.g., aching, burning, throbbing).
- Use a specialized assessment tool for patients who cannot answer questions.
- Note factors that make the pain better or worse.
- Identify recent exacerbations of chronic pain (is there a pattern?).
- Assess or evaluate how pain is affecting the patient's mood and its impact on activities of daily living (ADLs), sleep, and selected quality-of-life measures (e.g., participation in hobbies, visiting with family).
- Determine whether the current level of pain relief is consistent with the patient's care goals. Some patients may prefer to tolerate a certain level of pain or to avoid analgesic medications, medication side effects, or other interventions.
- Note the dosage and frequency of administration of all pain medications.
- Note all treatments that the patient is receiving for pain, including all nonpharmacologic and complementary and alternative medicine (CAM) therapies.
- Review the effectiveness of specific drugs and other treatments used in the past to treat pain.
- Discontinue the use of drugs or other treatments that are ineffective.

Instruments that may be used to assess pain intensity in patients with cognitive impairments are included in Appendix 1 of the original guideline document.

### Step 3

#### Provide Appropriate Interim Treatment for Pain

If a patient is experiencing pain that is not being treated or is not adequately relieved by existing therapies, the practitioner should adjust or

prescribe a pain relief regimen to maximize the patient's comfort and minimize side effects while actively assessing the patient for underlying causes of the pain. Patients with acute injury should receive pain medication while awaiting diagnostic testing or transfer to the emergency department.

### Assessment

The appropriate scope of a workup for pain may vary according to the patient's care goals and prognosis.

#### Step 4

#### Perform a Pertinent History and Physical Examination

The practitioner should take a medical pain-related history and perform a detailed physical examination. Pay particular attention to body regions and organ systems that appear to be related to or contributing to the patient's pain.

#### Step 5

#### Are the Cause(s) of Pain Identified?

If yes, proceed to Step 10. If no, proceed to Step 6.

#### Step 6

#### Perform Further Diagnostic Testing as Indicated

On the basis of the specific findings of the history and physical examination in Step 4, the practitioner should perform laboratory, radiologic, and other diagnostic tests as appropriate.

#### Step 7

#### Have the Probable Cause(s) of Pain Been Identified?

If yes, proceed to Step 10. If no, proceed to Step 8.

#### Step 8

#### Obtain Additional Evaluation or Consultation as Necessary

Consider consultation when the diagnoses or conditions contributing to pain are still not clear after completion of Steps 4 to 7 or if special skills are required for definitive treatment.

#### Step 9

#### Have the Probable Cause(s) of Pain Been Identified?

If yes, proceed to Step 10. If no, review Steps 4 to 8. If the cause(s) of pain still cannot be identified, document the inability to do so and proceed to Step 10.

#### Step 10

#### Summarize the Characteristics and Causes of the Patient's Pain and Assess the Impact of Pain on Function and Quality of Life

The practitioner and staff should collaborate on documenting a summary of the patient's situation that includes:

- A description of the diagnoses and conditions contributing to the patient's pain or reasons that the causes of the pain could not be established
- A list of possible treatments for underlying diagnoses or conditions that are contributing to the patient's pain
- Reasons for recommending the use or nonuse of identified treatment options, taking into account the patient's state of health, prognosis, and advance care directives as well as the preferences of the patient and family or health care proxy
- Provision for access to family and friends, life review, quality life experiences, and completion of unfinished business at the end of life

### Treatment

All patients with pain should be cared for in an environment that is as comforting and supportive as possible.

## Step 11

### Adopt a Patient-centered Interdisciplinary Care Plan

After reviewing the characteristics and causes of the patient's pain, the practitioner should help the interdisciplinary team to develop a treatment plan tailored to the patient's needs and preferences. Factors influencing the choice of treatments include:

- The patient's underlying diagnoses or conditions that are causing or contributing to pain
- The causes, location, nature, and severity of the pain
- The patient's preferences and wishes as expressed directly, by a family member or other health care proxy, or in an advance directive
- The patient's goal for pain management with respect to what constitutes an acceptable pain level, an acceptable sedation level, and acceptable side effects
- Preferred route of medication administration
- Availability of experienced providers
- Possible adverse medication effects
- Cost to the patient
- Costs of medication acquisition

Ideally, the team should create a care plan that addresses a patient's "total pain."

## Step 12

### Set Goals for Pain Relief

Establish the goals of pain treatment with input from the patient and family or health care proxy. For patients with chronic pain, primary goals often include not only reducing pain intensity but also achieving functional outcomes such as improving independence in ADLs, participating in activities, or optimizing cognition, mood, or sleep.

## Step 13

### Implement the Care Plan

On the basis of the information obtained and the analyses performed in the previous steps, implement an organized approach to managing the patient's pain.

Table. General Principles for Prescribing Analgesics in the Long Term Care Setting

- Evaluate the patient's medical condition and current medication regimen to determine the most appropriate therapy for pain.
- Consider whether the medical literature contains evidence-based recommendations for specific regimens to treat identified causes of pain.
- In most cases, prescribe at least one routine, scheduled analgesic medication if the pain is felt to be chronic and persistent.\*
- Have an as needed (PRN) medication available for severe or breakthrough pain.
- Use the least invasive route of administration possible; as a rule, the oral route is preferable.
- For nonsevere chronic pain, begin with a low dose and titrate carefully until comfort is achieved.
- For severe or acute pain, begin with a low or moderate dose as needed and titrate more rapidly than for chronic pain.
- Reassess and adjust the dose to optimize pain relief while monitoring and trying to minimize or manage side effects.
- Periodically assess the use of PRN medication to manage breakthrough pain and adjust routinely administered medication accordingly.

\*Exceptions to this principle are the use of PRN medication for mild to moderate pain and patient preference.

The World Health Organization (WHO) has recommended a three-step "ladder" approach to pain management that is based on pain severity (see Figure 1 in the original guideline document).

The WHO also recommends administering analgesic medications:

- By mouth if possible
- Around-the-clock for continuous pain

- According to the pain relief ladder
- Tailored to the individual patient
- With attention to detail

See the original guideline document for recommendations for the administration and titration of specific pain medications.

### *Treatment of Neuropathic Pain*

Neuropathic pain is often difficult to control and may require multiple medications affecting different sites along nerve pathways from the periphery to the spinal cord and brain. Medications used to treat neuropathic pain include anticonvulsants, opioids, serotonin-norepinephrine reuptake inhibitors (SNRIs), topical analgesics, and tricyclic antidepressants. See Table 12 in the original guideline document for important steps in the treatment of neuropathic pain.

### Monitoring

Reassess patients with pain regularly. During titration of treatment for acute pain, specify the intervals at which acute pain should be evaluated. At a minimum, reassess patients with acute pain daily until the pain is substantially controlled and a stable analgesic regimen has been established. Ideally, the effectiveness of an analgesic should be assessed at the time of its peak effect, usually 1 hour for oral opioids. Staff members should also assess or evaluate the degree of pain relief just before and after administration of analgesics. It is reasonable to assess pain as the fifth vital sign when collecting vital signs for other reasons. All caregivers should be continually vigilant for signs or symptoms suggesting pain during daily activities or with procedures or therapy that may cause pain.

### Step 14

#### Re-evaluate the Patient's Pain

Because pain may fluctuate over time, use an appropriate pain assessment tool to re-evaluate the patient whenever caregivers believe inadequate pain control is affecting the patient's:

- Ability to perform ADLs
- Attainment of personal and therapeutic goals
- Mood, cognition, and behavior
- Participation in usual activities
- Sleep pattern

Review and reassess the following:

- Characteristics of pain (e.g., frequency, intensity). In cognitively impaired patients, review and assess behavioral signs and symptoms that suggest pain
- The impact of pain on the patient's mood, ADLs, sleep, and quality-of-life measures
- The conditions or diagnoses associated with the patient's pain
- The treatment plan and effectiveness of current medications and CAM treatments
- The adverse effects of analgesic drugs, CAM treatments, and nonpharmacologic therapies

### Step 15

#### Adjust Treatment as Necessary

On the basis of the findings in Step 14, determine whether revision of the patient's care plan is indicated. If it is, prepare a revised care plan that recommends appropriate medications and complementary therapies. Explain the reasons for the proposed treatment changes to the patient and family or health care proxy.

Consider tapering the patient's analgesic medication if the cause of his or her pain has been identified and addressed and is expected to improve (e.g., recovery from surgery). The timing of any medication reduction is a matter of clinical judgment. Repeat Steps 14 and 15 as frequently as is appropriate for the patient.

### Step 16

#### Is Pain Controlled?

Review and repeat the steps in this guideline as appropriate until the patient's pain is controlled or it is determined that no further improvement is

likely. When patients have pain that is unresponsive to the management steps outlined in this guideline and the practitioner is uncomfortable with treating the pain more aggressively, the practitioner should consider consulting with a pain specialist or a geriatrician, neurologist, physiatrist, or palliative medicine practitioner.

In some patients, pain may relate to a somatoform disorder or may have a spiritual or existential component. When these conditions are suspected or when pain does not respond adequately to other, more conventional treatment strategies, psychiatric, psychological, or spiritual consultation may be of benefit and should be considered. Incorporate acceptable recommendations into the patient's care plan.

Step 17

#### Monitor the Facility's Performance in the Management of Pain

Review the management of patients with pain through the facility's quality improvement process. Table 13 in the original guideline document suggests indicators that a facility may wish to use to measure the success of interventions to manage pain.

## Clinical Algorithm(s)

An algorithm for pain management in the long term care setting is provided in the original guideline document.

## Scope

### Disease/Condition(s)

- Acute pain
- Chronic pain

### Guideline Category

Diagnosis

Evaluation

Management

Risk Assessment

Treatment

### Clinical Specialty

Family Practice

Geriatrics

Internal Medicine

Nursing

Pharmacology

### Intended Users

Advanced Practice Nurses

Allied Health Personnel

Dietitians

Health Care Providers

Nurses

Occupational Therapists

Pharmacists

Physical Therapists

Physician Assistants

Physicians

Social Workers

## Guideline Objective(s)

- To improve the quality of care delivered to patients with acute or chronic pain in long term care (LTC) settings
- To serve as a foundation for a systematic approach to recognition, assessment, treatment, and monitoring of pain in patients in LTC settings

## Target Population

Elderly residents of long term care (LTC) facilities with acute or chronic pain or who are at risk of pain

## Interventions and Practices Considered

### Diagnosis/Risk Assessment/Evaluation

1. Regular and systematic assessment for presence of pain
2. Observation for nonspecific signs and symptoms that suggest pain
3. Identification of characteristics and causes of pain
4. Use of a standardized scale to quantify the intensity of the patient's pain
5. Provision of appropriate interim treatment for pain
6. Identification and addressing of risk factors for pain during assessment
7. Assessment of impact pain has on function and quality of life
8. History and physical examination
9. Diagnostic testing (laboratory, radiologic, other), as indicated
10. Consultation with pharmacist and pain specialists, as needed

### Management/Treatment

1. Patient-centered interdisciplinary care planning
2. Environment support to promote comfort
3. Setting goals for pain relief
4. Implementing the care plan
5. Pharmacologic treatment
  - Non-opioid analgesics, such as acetaminophen, nonsteroidal anti-inflammatory drugs (NSAIDs), cyclooxygenase-2 (COX-2) inhibitors, and tramadol.
  - Opioid analgesics (morphine, oxycodone, hydromorphone, hydrocodone, oxymorphone, tapentadol, methadone, fentanyl patch, non-topical fentanyl formulations)
  - Topical analgesics (counter-irritants, capsaicin, topical diclofenac, lidocaine patch)
  - Medications for neuropathic pain (anticonvulsants, secondary amine tricyclic antidepressants, selective serotonin and norepinephrine reuptake inhibitors)

6. Complementary and alternative (nonpharmacologic) therapies
7. Evaluation of response to treatment, monitoring of patient's pain, and adjustment of treatment as needed

Note: The NSAIDs indomethacin, piroxicam, tolmetin, and meclofenamate are considered but not recommended for chronic use. Meperidine and the partial opioid agonists butorphanol, nalbuphine, and pentazocine, as well as fixed-dose agonist–antagonist combination products, are also not recommended.

## Major Outcomes Considered

- Change in pain intensity
- Number of patients with pain relief
- Number of patients with improvement in mood, daily function, sleep, and quality of life
- Safety and side effects of medications

## Methodology

### Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

### Description of Methods Used to Collect/Select the Evidence

The clinical practice committee vice-chair performs a systematic literature search for the topic of the guideline, using the electronic databases MEDLINE, PubMed, etc. Each year the Steering Committee reviews all American Medical Directors Association (AMDA) clinical practice guidelines that are 3 years old and commissions a thorough literature review to determine whether the content of each guideline remains current. If new literature does not change the content or scope of the original guideline, it is deemed to be current.

For this guideline revision, databases were searched between June 2009 and January 2011 for updated literature related to pain management in the long term care setting. Inclusion criteria included elderly, long term care, and pain management topics. The following search terms were used: elderly, long term care, nursing home, pain, dementia and pain, pain scales, pain causes, pain treatment, pain management, nonsteroidal anti-inflammatory drugs, opioids, methadone, topical morphine.

### Number of Source Documents

Not stated

### Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

### Rating Scheme for the Strength of the Evidence

Quality of Evidence

The quality of evidence indicates the extent to which one can be confident that an estimate of effect is correct.

High: At least 1 randomized controlled trial OR 3 pre/post interventions or other prospective interventions or 3 well-structured, relevant observational studies

Moderate: Studies that use well-tested methods to make comparisons in a fair way, but where the results leave room for uncertainty (e.g., because of the size of the study, losses to follow-up, or the method used for selecting groups for comparison)

Low: Studies in which the results are doubtful because the study design does not guarantee that fair comparisons can be made

## Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review

## Description of the Methods Used to Analyze the Evidence

Grading System for American Medical Directors Association (AMDA) Clinical Practice Guidelines

Judgments about the quality of evidence (see the "Rating Scheme for the Strength of the Evidence" field) require assessing the validity of results for important outcomes in individual studies. Explicit criteria should be used in making these judgments. In the Grading of Recommendations, Assessment, Development and Evaluation (GRADE) Working Group approach, a systematic review of available evidence guides these judgments.

Sequential judgments are made concerning the following factors:

- The quality of evidence across studies for each important outcome
- Which outcomes are critical to a decision
- The overall quality of evidence across these critical outcomes
- The balance between benefits and harms
- The strength of recommendations

Reviewers consider four key elements: study design, study quality, consistency, and directness.

### Definitions

Study design refers to the basic study design (broadly, observational studies and randomized trials).

Study quality refers to the detailed study methods and execution. Appropriate criteria are used to assess study quality for each important outcome. For randomized trials, for example, these criteria might include the adequacy of allocation concealment, blinding, and follow up. Reasons for downgrading a quality rating must be explicit (e.g., failure to blind patients and physicians reduced the quality of evidence for an intervention's impact on pain severity, a serious limitation).

Consistency refers to the similarity of effect estimates across studies. If there is important unexplained inconsistency in study results, confidence in the effect estimate for that outcome is reduced.

Directness refers to the extent to which the people, interventions, and outcome measures in the studies are similar to those of interest. For example, the directness of the evidence may be uncertain if the people of interest are older, sicker, or have more comorbidity than those in the studies. To determine whether important uncertainty exists, one can ask whether there is a compelling reason to expect important differences in the effect size. Because many interventions have more or less the same relative effects across most patient groups, reviewers should not use overly stringent criteria in deciding whether evidence is direct.

### Criteria

Criteria for decreasing the grade:

- Serious (-1) or very serious (-2) limitation to study quality
- Important inconsistency (-1)
- Some (-1) or major (-2) uncertainty about directness
- Imprecise or sparse data (-1)
- High probability of reporting bias (-1)

Criteria for increasing the grade:

- Strong evidence of association: Significant relative risk greater than 2 (less than 0.5), based on consistent evidence from two or more observational studies, with no plausible confounders (+1)

- Very strong evidence of association: Significant relative risk greater than 5 (less than 0.2), based on direct evidence with no major threats to validity (+2)
- Evidence of a dose-response gradient (+1)
- All plausible confounders would have reduced the effect (+1)

These criteria are cumulative – e.g., if randomized controlled trials (RCTs) have serious limitations and there is uncertainty about the directness of the evidence, the grade of evidence would drop from high to low.

## Methods Used to Formulate the Recommendations

Expert Consensus

## Description of Methods Used to Formulate the Recommendations

Original guidelines are developed by interdisciplinary workgroups, using a process that combines evidence- and consensus-based approaches. Workgroups include practitioners and others involved in patient care in long term care facilities. Beginning with pertinent literature searches for articles and information related to the guideline subject and a draft outline/framework, each group works to develop a concise, usable guideline that is tailored to the long term care setting. Because scientific research in the long term care population is limited, many recommendations are based on findings from research involving community-living older adults. Some recommendations are based on the expert consensus opinion of practitioners and experts in the field of geriatric medicine.

The American Medical Directors Association (AMDA) Clinical Practice Guideline Steering Committee directs the guideline development and revision process. Each year the Steering Committee reviews all AMDA clinical practice guidelines that are 3 years old and commissions a thorough literature review to determine whether the content of each guideline remains current. The AMDA Clinical Practice Committee Chair selects the existing guidelines to be revised and new guidelines to be created based on 1) the Steering Committee's recommendations, 2) data collected, and 3) an assessment of the difficulty of development and relevance to the AMDA membership. AMDA's Board of Directors has final approval over this process.

### Grading System for AMDA Clinical Practice Guidelines

The system AMDA has adopted for grading clinical practice guidelines (see the "Rating Scheme for the Strength of the Recommendations" field) is based on the Grading of Recommendations Assessment, Development and Evaluation (GRADE) Working Group Approach.

Sequential judgments are made concerning the following factors:

- The quality of evidence across studies for each important outcome
- Which outcomes are critical to a decision
- The overall quality of evidence across these critical outcomes
- The balance between benefits and harms
- The strength of recommendations

## Rating Scheme for the Strength of the Recommendations

### Strength of Recommendation

The strength of a recommendation indicates the extent to which one can be confident that adherence to the recommendation will do more good than harm.

- Strong: Benefits clearly outweigh risks.
- Weak: Benefits are balanced with risks.
- Insufficient: Evidence is inadequate to make a recommendation.

## Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

# Method of Guideline Validation

External Peer Review

Internal Peer Review

## Description of Method of Guideline Validation

All American Medical Director Association (AMDA) clinical practice guidelines undergo external review. The draft guideline is sent to approximately 175+ reviewers. These reviewers include AMDA physician members and independent physicians, specialists, and organizations that are knowledgeable of the guideline topic and the long term care setting.

AMDA's guidelines are supported by the following associations/organizations, who are members of its Clinical Practice Guideline Steering Committee. These associations/organizations all have representatives who participate in the external review phase and officially sign off on the guideline before publication: American Association of Homes and Services for the Aging (Now LeadingAge); American College of Health Care Administrators; American Geriatrics Society; American Health Care Association; American Society of Consultant Pharmacists; Gerontological Advanced Practice Nurses Association; Direct Care Alliance; National Association of Directors of Nursing Administration in Long Term Care; National Association of Health Care Assistants.

## Evidence Supporting the Recommendations

### Type of Evidence Supporting the Recommendations

The type of evidence supporting the recommendations is not specifically stated.

The approach to pain management set forth in this clinical practice guideline is based on scientific evidence where such evidence exists. Where scientific evidence is lacking, the guideline relies on consensus among experienced professionals representing a wide range of disciplines in the long term care setting.

## Benefits/Harms of Implementing the Guideline Recommendations

### Potential Benefits

- This guideline recommends processes that, if followed, will help to ensure that pain among patients in long term care (LTCs) facilities is adequately recognized, assessed, treated, and monitored.
- By implementing the steps described in this guideline, health care providers can meet the expectations of patients, their families, advocates, and policy makers for adequate, compassionate management of pain in the LTC setting.

### Potential Harms

#### Acetaminophen

Although most studies have not found significant elevations of liver transaminases with daily dosing of acetaminophen, a study of healthy adults receiving 4 g of acetaminophen daily found transaminase levels 3 times the upper limit of normal in 31% to 40% of participants. The U.S. Food and Drug Administration (FDA) has recommended limiting the total daily dose of acetaminophen to 3000 mg for most elderly patients and 2000 mg for elderly patients with renal or hepatic insufficiency. At this time, routine monitoring of transaminase levels is not recommended.

#### Nonsteroidal Anti-inflammatory Drugs (NSAIDs)

- The long term use of full-dose, longer half-life, nonselective NSAIDs such as naproxen, oxaprozin, and piroxicam is generally not recommended in geriatric patients because of its potential to produce gastrointestinal (GI) bleeding, renal failure, high blood pressure, and heart failure.

- The FDA has issued warnings about increased cardiovascular risks associated with both selective and nonselective NSAIDs. This chance increases with longer use of NSAIDs and in people who have heart disease. NSAIDs are associated with an increase of 1% to 2% annually in the rate of serious cardiovascular endpoints (e.g., cardiovascular death, congestive heart failure, myocardial infarction, stroke). Patient characteristics that increase the likelihood of adverse cardiovascular outcomes include age over 65, established cardiovascular disease, male gender, and the presence of three or more cardiovascular risk factors.
- NSAIDs can cause ulcers and bleeding in the stomach and intestines at any time during treatment. Ulcers and bleeding can happen without warning symptoms and may cause death. Annually, 1.5% of patients treated with NSAIDs experience GI bleeding requiring hospital care; death from GI bleeding occurs annually in 0.2% of treated patients. Risk factors that increase the likelihood of GI bleeding include age over 75, female gender, a history of prior GI events or cardiovascular disease, rheumatoid arthritis, and use of corticosteroids or anticoagulants. Aspirin, commonly administered for cardiovascular protection, doubles the rate of adverse GI events among patients receiving NSAIDs.
- See Table 6 in the original guideline document for specific recommendations for selective and nonselective NSAID use according to patient's underlying risks and comorbid conditions.

## Tramadol

- Tramadol's potential adverse effects include confusion, constipation, dizziness, gait disturbances, nausea, orthostatic hypotension, and sleepiness. Because it lowers the seizure threshold, tramadol can precipitate seizures in patients who have or who are at risk for a seizure disorder.
- Practitioners should be aware of the risk for the potentially life-threatening serotonin syndrome, a constellation of signs and symptoms of the central nervous system (e.g., agitation, coma, hallucinations), autonomic system (e.g., hyperthermia, labile blood pressure, tachycardia), neuromuscular system (e.g., hyperreflexia, incoordination), and GI system (e.g., diarrhea, nausea, vomiting). This syndrome is more likely to occur when tramadol is prescribed to a patient who is also receiving a selective serotonin reuptake inhibitor, serotonin–norepinephrine reuptake inhibitor, tricyclic antidepressant, monoamine oxidase inhibitor (MAOI; e.g., selegiline, rasagiline), or the reversible nonselective MAOI antibiotic linezolid. Drugs that reduce tramadol's metabolism (e.g., amitriptyline, erythromycin, fluoxetine, ketoconazole, paroxetine, quinidine) may also increase the risk of serotonin syndrome.

## Topical NSAIDs and Analgesics

See Table 7 in the original guideline document for recommended precautions for topical analgesics and NSAIDs.

## Opioid Analgesics

- Administering opioids to frail elderly patients may be associated with an array of unwanted symptoms, including confusion, constipation, drowsiness, hallucinations, itching, nausea, postural hypotension, urinary retention, and vertigo. It is wise to anticipate these symptoms and to educate the patient, family, and caregiving staff about symptoms to expect when beginning or titrating opioids. Although the constipating effects of opioids persist throughout the course of treatment, patients develop tolerance to most of the other symptoms within a few days. To minimize adverse opioid effects, review the patient's entire medication regimen to determine whether other medications with adverse effects similar to those of opioids can be adjusted or eliminated.
- Respiratory depression is both the most feared and the least common adverse effect of opioid analgesics. Although a degree of concern about respiratory depression is appropriate, it does not warrant withholding opioid treatment from a patient with moderate or severe pain that is unresponsive to other medications. The risk of respiratory depression may be minimized by starting with a low opioid dose and titrating slowly upward and avoiding drug-drug interactions with other central nervous system depressants (such as benzodiazepines).
- In 2005, the FDA issued a public health advisory and began an investigation into deaths and other serious events related to opioid overdose in patients using fentanyl patches. In that advisory, the FDA warned that fentanyl patches "should ONLY be used in patients who are already receiving opioid therapy, who have demonstrated opioid tolerance and require a total daily dose at least equivalent to Duragesic® 25 mcg/hr."
- The fentanyl patches should not be exposed to direct sources of heat, such as heating pads or electric blankets. The heat may cause increased absorption of the medication, which can result in serious, even fatal, side effects. Increased absorption can also occur in patients with fever. Fentanyl transdermal patch should be used with caution (or avoided) in debilitated patients because they may have altered pharmacokinetics owing to poor fat stores, muscle wasting, or altered clearance.
- The dose of transdermal buprenorphine (Butrans® [Purdue Pharma L.P., Stamford, CT]) should not exceed one 20 mcg/hour patch because of the risk of QTc interval prolongation. Avoid exposing the application site and surrounding area to direct external heat sources, such as a heating pad. Temperature-dependent increases in buprenorphine release from the system may result in overdose and death. Respiratory depression is the chief hazard of Butrans.
- Methadone has a prolonged and variable metabolism and half-life elimination phase, as well as complex medication interactions that can result in life-threatening adverse effects and fatalities. Methadone in moderate doses can prolong the QT interval and cause fatal cardiac

arrhythmias, especially in patients who have cardiac disease or take medications that can prolong the QT interval. Thus, methadone should be used only by (or in consultation with) a practitioner who has experience and expertise treating frail elders with methadone. Appendix 4 in the original guideline contains additional information and recommendations about methadone pharmacology, precautions, and effects on the QT interval.

#### Non-opioid Analgesics

See Table 5 in the original guideline document for a listing of possible adverse effects and recommended precautions for with non-opioid analgesics commonly used in the long term care (LTC) setting.

## Contraindications

### Contraindications

#### Nonsteroidal Anti-inflammatory Drugs (NSAIDs)

Should generally be avoided in:

- Patients with renal insufficiency and compromised liver function
- Patients receiving anticoagulant therapy with warfarin, heparin, or low-molecular-weight heparin
- Patients receiving aspirin for cardiovascular protection because of both an increased risk of gastrointestinal (GI) bleeding and interference with aspirin's anti-platelet effect

#### Topical NSAIDs

- Contraindicated if patient has prior NSAID-induced anaphylaxis, asthma, or hives.
- Avoid use in combination with aspirin or other NSAIDs.
- Do not apply to broken skin or dermatitis.
- Do not apply with other topical agents.

#### Methadone

Contraindicated if a patient is receiving a monoamine oxidase inhibitor or has severe chronic obstructive pulmonary disease or acute asthma

See Appendix 5 of the original guideline document for additional precautions and contraindications to adjuvant analgesic medications.

## Qualifying Statements

### Qualifying Statements

- This clinical practice guideline is provided for discussion and educational purposes only and should not be used or in any way relied upon without consultation with and supervision of a qualified physician based on the case history and medical condition of a particular patient. The American Medical Directors Association (AMDA), its heirs, executors, administrators, successors, and assigns hereby disclaim any and all liability for damages of whatever kind resulting from the use, negligent or otherwise, of this clinical practice guideline.
- The utilization of AMDA's Clinical Practice Guideline does not preclude compliance with State and Federal regulation as well as facility policies and procedures. They are not substitutes for the experience and judgment of clinicians and caregivers. The Clinical Practice Guidelines are not to be considered as standards of care but are developed to enhance the clinicians' ability to practice.
- This Clinical Practice Guideline is not intended to be a comprehensive treatise on all possible types of pain or on all evaluations, interventions, or medications for pain. Rather, it should serve as a foundation for a systematic approach to recognition, assessment, treatment, and monitoring of pain in long term care patients.
- Although many principles contained in this Clinical Practice Guideline can apply to pain management for patients who are enrolled in hospice care, who are receiving specialized pain management from a pain specialist, or who are at the end of life, this document does not cover advanced treatment options or comprehensive symptom control.
- AMDA guidelines emphasize key care processes and are created to be used in conjunction with facility-specific policies and procedures

that guide staff and practitioner practices and performance. They are meant to be used in a manner appropriate to the population and practice of a particular facility. Guideline implementation may be affected by resources available in the facility, including staffing, and will require the involvement of all those in the facility who have a role in patient care.

- Long term care facilities care for a variety of individuals, including younger patients with chronic diseases and disabilities, short-stay patients needing postacute care, and very old and frail individuals suffering from multiple comorbidities. When a workup or treatment is suggested, it is crucial to consider whether such a step is appropriate for a specific individual. A workup may not be indicated if the patient has a terminal or end-stage condition, if it would not change the management course, if the burden of the workup is greater than the potential benefit, or if the patient or his or her legally authorized representative would refuse treatment. It is important to carefully document in the patient's medical record the reasons for decisions not to treat or perform a workup or for choosing one treatment approach over another.

## Implementation of the Guideline

### Description of Implementation Strategy

The implementation of this clinical practice guideline (CPG) is outlined in four phases. Each phase presents a series of steps, which should be carried out in the process of implementing the practices presented in this guideline. Each phase is summarized below.

#### I. Recognition

- Define the area of improvement and determine if there is a CPG available for the defined area. Then evaluate the pertinence and feasibility of implementing the CPG.

#### II. Assessment

- Define the functions necessary for implementation and then educate and train staff. Assess and document performance and outcome indicators and then develop a system to measure outcomes.

#### III. Implementation

- Identify and document how each step of the CPG will be carried out and develop an implementation timetable.
- Identify individual responsible for each step of the CPG.
- Identify support systems that impact the direct care.
- Educate and train appropriate individuals in specific CPG implementation and then implement the CPG.

#### IV. Monitoring

- Evaluate performance based on relevant indicators and identify areas for improvement.
- Evaluate the predefined performance measures and obtain and provide feedback.

Table 13 in the original guideline document suggests indicators that a facility may wish to use to measure the success of interventions to manage pain.

## Implementation Tools

Audit Criteria/Indicators

Chart Documentation/Checklists/Forms

Clinical Algorithm

Resources

Staff Training/Competency Material

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

## Institute of Medicine (IOM) National Healthcare Quality Report Categories

## IOM Care Need

End of Life Care

Getting Better

Living with Illness

## IOM Domain

Effectiveness

Patient-centeredness

Safety

## Identifying Information and Availability

### Bibliographic Source(s)

American Medical Directors Association (AMDA). Pain management in the long term care setting. Columbia (MD): American Medical Directors Association (AMDA); 2012. 60 p. [93 references]

### Adaptation

Not applicable: The guideline was not adapted from another source.

### Date Released

1999 (revised 2012)

### Guideline Developer(s)

American Medical Directors Association - Professional Association

### Guideline Developer Comment

Organizational participants:

- American College of Health Care Administrators
- American Geriatrics Society
- American Health Care Association
- American Society of Consultant Pharmacists
- Direct Care Alliance
- Gerontological Advanced Practice Nurses Association
- LeadingAge
- National Association of Directors of Nursing Administration in Long Term Care
- The AMDA Foundation

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Clinical Practice Guideline Steering Committee

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## Financial Disclosures/Conflicts of Interest

All contributors must submit an Accreditation Council for Continuing Medical Education (ACCME) approved disclosure form prior to being accepted as a volunteer member of the guideline workgroup. This disclosure form is reviewed by the chair of the American Medical Directors Association (AMDA) Clinical Practice Committee. If any conflicts are perceived, that person is not accepted to be part of the workgroup.

## Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: American Medical Directors Association (AMDA). Pain management in the long-term care setting. Columbia (MD): American Medical Directors Association (AMDA); 2009. 48 p.

## Guideline Availability

Electronic copies: Not available at this time.

Print copies: Available from the American Medical Directors Association, 10480 Little Patuxent Pkwy, Suite 760, Columbia, MD 21044.

Telephone: (800) 876-2632 or (410) 740-9743; Fax (410) 740-4572. Web site: [www.amda.com](http://www.amda.com) .

## Availability of Companion Documents

The following is available:

- Symptom acuity graph. Columbia (MD): American Medical Directors Association. 2 p. Electronic copies: Available in Portable Document Format (PDF) from the [AMDA Web site](#) .

Table 13 in the original guideline document suggests indicators that a facility may wish to use to measure the success of interventions to manage pain.

In addition, the following are available in the appendices of the original guideline document:

- Examples of Pain Scales Appropriate for Patients with Cognitive Impairment
- FACES Pain Rating Scale
- Noncommunicative Patient's Pain Assessment Instrument (NOPPAIN)
- Iowa Pain Thermometer
- Abbey Pain Scale
- Opioid Initiation and Titration Worksheet
- Model Transdermal Fentanyl Policy
- Methadone Use in the Long Term Care Setting

## Patient Resources

None available

## NGC Status

This NGC summary was completed by ECRI on July 6, 2004. The information was verified by the guideline developer on August 4, 2004. This summary was updated by ECRI on January 12, 2005 following the release of a public health advisory from the U.S. Food and Drug Administration regarding the use of some non-steroidal anti-inflammatory drug products. This summary was updated on April 15, 2005 following the withdrawal of Bextra (valdecoxib) from the market and the release of heightened warnings for Celebrex (celecoxib) and other nonselective nonsteroidal anti-inflammatory drugs (NSAIDs). This summary was updated by ECRI on June 16, 2005, following the U.S. Food and Drug Administration advisory on COX-2 selective and non-selective non-steroidal anti-inflammatory drugs (NSAIDs). This summary was updated by ECRI Institute on January 10, 2008, following the U.S. Food and Drug Administration advisory on Carbamazepine. This summary was updated by ECRI Institute on November 1, 2010. The updated information was verified by the guideline developer on December 21, 2010. This summary was updated by ECRI Institute on March 16, 2011 following the U.S. Food and Drug Administration advisory on acetaminophen-containing prescription products. This NGC summary was updated by ECRI Institute on August 9, 2013. The updated information was verified by the guideline developer on September 27, 2013. This summary was updated by ECRI Institute on September 18, 2015 following the U.S. Food and Drug Administration advisory on non-aspirin nonsteroidal anti-inflammatory drugs (NSAIDs). This summary was updated by ECRI Institute on June 2, 2016 following the U.S. Food and Drug Administration advisory on Opioid pain medicines.

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